

Work Order ID 79190

January-23-12 11:29:44 AM

79190

Page 1

Item ID: D4358-042

Accept

N9000040100

Setup Start *NS1*

Revision ID:

Item Name: Step, RH Maintenance

Stop *NS2*

Start Date: 23/01/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 06/02/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: M.C.5

Date: 12/01/23

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D4358	A

100 0.00

100

Large Fab

Large Fab

Memo

0.00

Large Fab

1-Cut D4358-1 using D2622 extrusion as per Dwg D4358
2-Drill, c'sink one hole on top of step as per dwg
3-Deburr and bevel ends for welding

12.01.25 1 0

110

QC6- Inspect dimensions to drawing

0.00

110

QC

Memo

0.00

Quality Control

12.01.25 1 0

120

Weld per dwg A/R Aluminum rod Batch: 114514 0.00

120

Large Fab

Large Fab

Memo

0.00

Large Fab

1-Weld end cap (ONE END ONLY)
2-Grind end cap welds flush
3-weld lugs as per Dwg D4358

12.01.25 1 0

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

79190

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N900040100

Setup Start *NS1*

Stop ***NS2***

Start Date: 23/01/2012 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 06/02/2012 **Req'd Qty:** 1.00 *** 1 ***

Customer:

Reference:

Approvals: _____ **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

**Insp.
Stamp**

0.00

130

QC

Memo

0.00

Quality Control

0.00

140

QC

Memo

0.00

Quality Control

0.00

150

HandFinish

Memo

0.00

Hand Finishing

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

W/O:		WORK ORDER CHANGES					
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 79190

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Item ID: D4358-042 Accept ***N9000040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Step, RH Maintenance
Start Date: 23/01/2012 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 06/02/2012 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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190 *190* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				(40) 21			
--	---	--------------	--	--	--	------------	--	--	--

200 *200* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00							
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210 *210* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum Memo	0.00 0.00							
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W119480

Start Time: 12:50
Temp: 320°F
Finish Time: 1:20

12/01/26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

79190

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N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 23/01/2012 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 06/02/2012 Req'd Qty: 1.00 * 1 *

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

**Insp.
Stamp**

0.00

211

QC

Memo

0.00

Quality Control

Wing Walk as per dwg QSI005 4.4 Batch 11/20/2000

215

HandFinish

Memo

0.00

Hand Finishing

QC3- Inspect Part Finish

0.00

220

QC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 79190

January-23-12 11:29:44 AM

79190

Page 6

Item ID: D4358-042 Accept *N9000040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Step, RH Maintenance
 Start Date: 23/01/2012 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 06/02/2012 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230	Identify as per dwg & Stock Location: <i>Shawn</i>	0.00							
230									
Packaging	Memo	0.00							
Packaging									
240	QC21- Final Inspection - Work Order Release	0.00							
240									
QC	Memo	0.00							
Quality Control									

(K) SP 12-01-27

12/1/31

12-01-30
C

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January-23-12 11:29:49 AM

Page 1

Work Order ID: 79190

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Parent Item: D4358-042

D4358-042

Parent Item Name: Step, RH Maintenance

Start Date: 23/01/2012

Required Date: 06/02/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 12-01-23 JLM VERIFIED BY: DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2622-120 ✓ *D2622-120* Step Extrusion		Manufactured	No		311653 10	B75781*	Each	0.0000		0.1		12.01.25	
D2734 *D2734* Step End Plate		Manufactured	No				Each	118.0000		2		12.01.25	
					<u>Location</u> WA B73416* 76985	<u>Loc Qty</u> 118 118							
D3461-5 *D3461-5* Mounting Plate		Manufactured	No				Each	19.0000		1		12.01.25	
					<u>Location</u> WA017	<u>Loc Qty</u> 19							
					<u>33862</u>	19							
D3461-7 *D3461-7* Mounting Plate		Manufactured	No				Each	21.0000		1		12.01.25	
					<u>Location</u> WA017	<u>Loc Qty</u> 21							
					<u>33863</u>	21							
MS20601-AD4W2 *MS20601-AD4W2* Rivet		Purchased	No				Each	166.0000		1		12.01.25	
					<u>Location</u> ST322	<u>Loc Qty</u> 166							
					<u>119232</u>	166							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

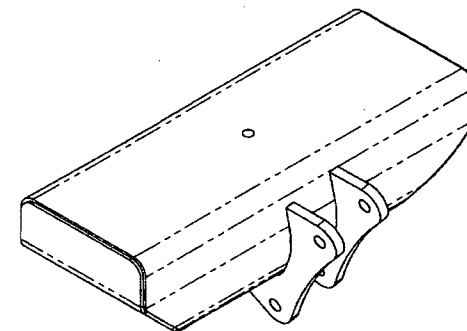
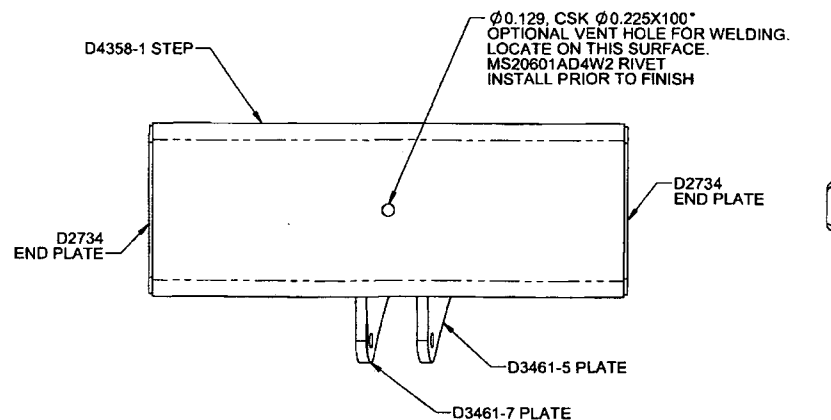
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

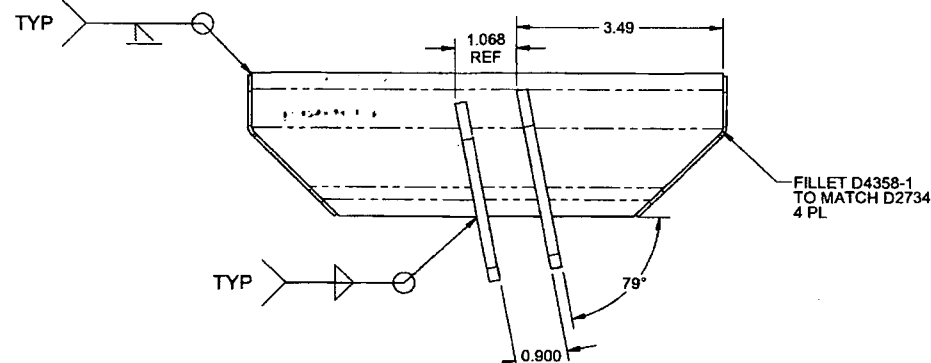
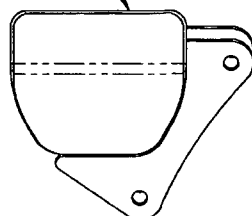
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM	QTY -041	P/N	DESCRIPTION
1	X	D4358-041	STEP, LH MAINTENANCE
2	1	D4358-1	STEP
3	2	D2734	END PLATE
4	1	D3461-5	PLATE
5	1	D3461-7	PLATE
6	1	MS20601AD4W2	RIVET (OPTIONAL)



2 APPLY BLACK ANTI-SKID ON TOP SURFACE TO BOTTOM OF TOP RADIUS



NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: P/N & B/N PER DART QSI 044 6.6 (REMOVABLE TAG)
- 7) WEIGHT: 0.65 lbs
- 8) WELDING: PER DART QSI 004

A	NEW ISSUE	CP	10.12.17
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.12.17		

RELEASED
2011-05-24

7919-041
12/01/23

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D4358	REV. A SHEET 1 OF 3
TITLE STEP, MAINTENANCE	SCALE NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

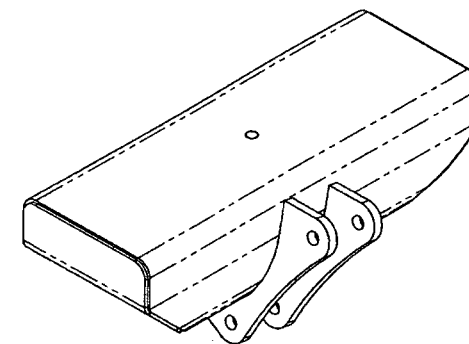
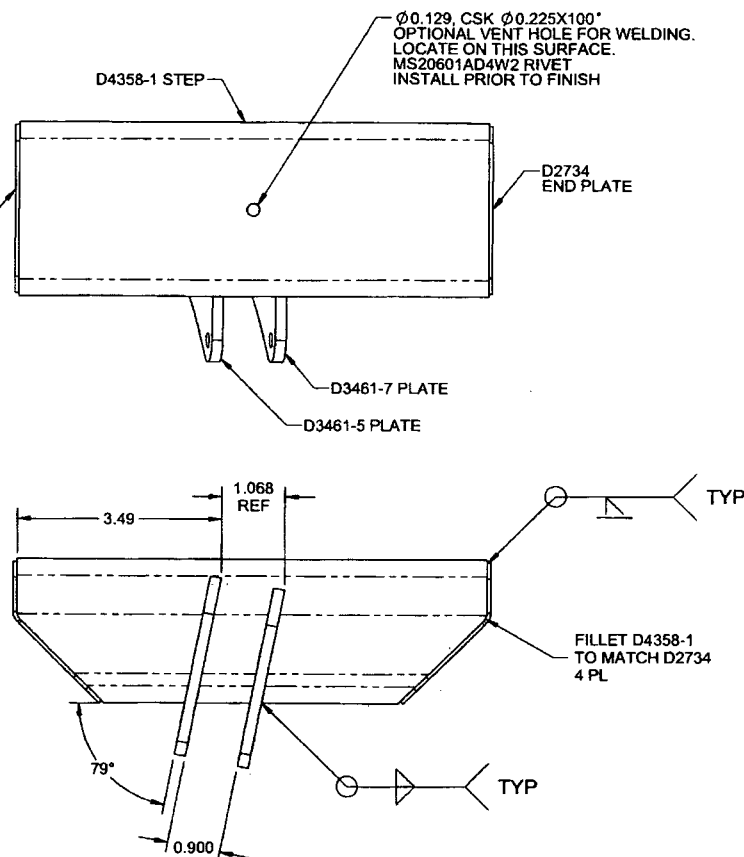
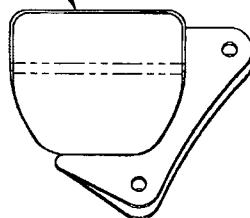
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

79190

ITEM	QTY	P/N	DESCRIPTION
1	X	D4358-042	STEP, RH MAINTENANCE
2	2	D2734	END PLATE
3	1	D3461-5	PLATE
4	1	D3461-7	PLATE
5	1	MS20601AD4W2	RIVET (OPTIONAL)
6	1	D4358-1	STEP

2 APPLY BLACK ANTI-SKID ON TOP SURFACE TO BOTTOM OF TOP RADIUS



D4358-042 STEP, RH MAINTENANCE

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: P/N & B/N PER DART QSI 044 6.6 (REMOVABLE TAG)
- 7) WEIGHT: 0.66 lbs
- 8) WELDING: PER DART QSI 004

RELEASED
2011-05-24

DESIGN		DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. D4358 REV. A
MFG. APPR.		SHEET 2 OF 3
APPROVED		TITLE STEP, MAINTENANCE SCALE NTS
DE APPR.		
DATE	10.12.17	

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

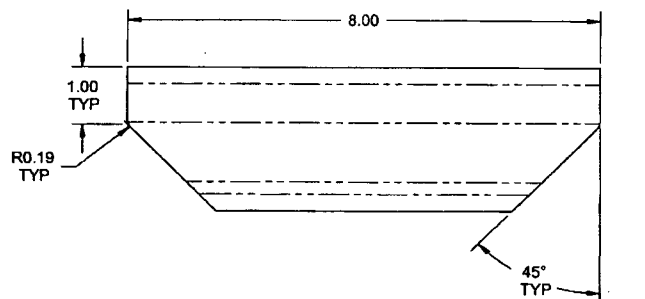
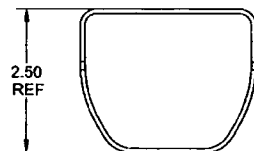
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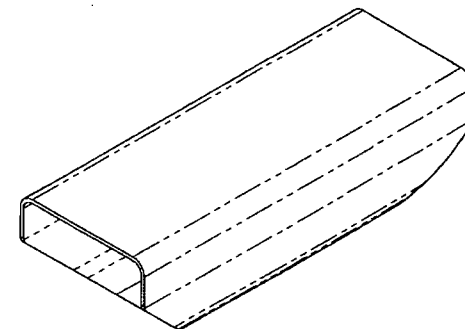
NOTE: Date & initial all entries

79190



D4358-1 STEP

3.00
REF



NOTES:

- 1) MATERIAL: MAKE FROM D2622 EXTRUSION
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.52 lbs

RELEASED
2011-05-26

DESIGN		DART AEROSPACE LTD	
DRAWN	<i>GP</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>ASS</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>ASS</i>	D4358	SHEET 3 OF 3
APPROVED	<i>ASS</i>	TITLE	SCALE
DE APPR.	<i>ASS</i>	STEP, MAINTENANCE	NTS
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